Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_

Solving Equations with Roots

When working on this activity, keep in mind that every square root has both a *positive* and a *negative* solution. Recall that cubes only have **one** solution, either *positive* or *negative*.

**In order to “undo” an exponent a root is used with the same degree on both sides of the equals sign.**  Example 🡪 x3 = 8 means we use on both sides. So and *x = -2*

**In order to use *a root*, your *variable* must be ALONE on one side of the equation.**

1. *x 2 = 49 8) x3 = -1*

*x = x =*

1. *x 2 = -121 9) x3 = 27*

*x = x =*

1. *x 2 = 625 10) x3 = 2197*

*x = x =*

1. *x 2 = 961 11) x3 = -6859*

*x = x =*

1. *3x2 = 48 12) 2x3 = 1024*

*x = x =*

1. *4x2 = 196 13) 5x3 = -6655*

*x = x =*

1. *x2= 15 14) x3 = -55*

*x = x =*